



Priscilla Emmett
Development Coordinator
Newcastle City Council
282 King Street
NEWCASTLE NSW 2300

Via email: pemmett@ncc.nsw.gov.au

Cc: djaegar@ncc.nsw.gov.au / neil@northrop.com.au

Dear Priscilla

**RE: BUILDING PROPOSAL AT 73 & 79 RAILWAY LANE WICKHAM
Lot 110 DP 1018454 & Lot 11 DP 1106378; TBA16-35551N1
NOTICE OF DETERMINATION**

I refer to the application detailed above. Subsidence Advisory NSW has determined to grant approval under section 15 of the *Mine Subsidence Compensation Act 1961*.

Approval has been granted, subject to the conditions set out in the attached determination.

Should you have any questions about the determination I can be contacted by phone on 4908 4300 or by email at shane.mcdonald1@finance.nsw.gov.au.

Yours faithfully,

Shane McDonald

Senior Risk Engineer

7 June 2016

DETERMINATION

Issued in accordance with section 15 of the *Mine Subsidence Compensation Act 1961*

As delegate for the Subsidence Advisory NSW under delegation executed 07.06.2017, approval is for the development described in Schedule 1, subject to the conditions attached in Schedule 2.

Determination Date: 7 June 2017

Approval to Lapse on: 7 June 2022

The conditions of approval are imposed for the following reasons:

- a) To confirm and clarify the terms of Subsidence Advisory NSW approval.
- b) To minimise the risk of damage to surface development from mine subsidence.



Shane McDonald

Senior Risk Engineer

7 June 2016

SCHEDULE 1

Application No. TBA16-35551N1

Applicant: Newcastle City Council

Site Address: 73 and 79 Railway Lane Wickham

Lot and DP: Lot 110 DP1018454 & Lot 11 DP1106378

Mine Subsidence District: Newcastle

Approved Documentation

This Approval incorporates the following referenced and stamped plans/documents:

Plans prepared by <i>EJE Architecture</i>			
Project No.	Issue	Project Name	Date
10670	-	New Mixed Use Residential Development	February 2016

SCHEDULE 2

CONDITIONS OF APPROVAL

GENERAL	
Plans, standards and guidelines	
1.	The development being undertaken strictly in accordance with the details set out on the application form, any information submitted with the application and the plans submitted, as amended or as modified by the conditions of this approval. Note: Any proposal to modify the terms or conditions of this approval, whilst still maintaining substantially the same development to that approved, will require the submission of a formal application for consideration by Subsidence Advisory NSW. If amendments to the design result in the development not remaining substantially the same as that approved by this approval, a new Application will have to be submitted to Subsidence Advisory NSW.
2.	This approval expires 5 years after the date the approval was granted if construction work has not physically commenced.

PRIOR TO COMMENCEMENT OF CONSTRUCTION

3.	a) Demonstrate through geotechnical investigation that the site is not undermined (the Northwest corner of the site should be targeted). The geotechnical investigation shall contain confirmation of the depth of coal seam, height of the seam (or mine workings if intersected) and thickness of competent rock. b) Meet with Subsidence Advisory NSW staff to discuss how potential unmapped mining will be evaluated prior to the completion of the desktop study. c) Submit a desktop study for Subsidence Advisory NSW's acceptance that includes predicted subsidence deformation parameters for Subsidence Advisory NSW's acceptance. These parameters will be based on the assumption that all of the pillars within the nearby abandoned mine workings fail and include predicted tilt, strain, radius of curvature and vertical subsidence parameters. d) Demonstrate that the improvement can be designed to remain "safe, serviceable and any damage from mine subsidence will be limited to cosmetic damage, and readily repairable" given the subsidence parameters outlined in the desktop study.
4.	Submit an "Engineering Impact Statement" prior to commencement of detailed design for acceptance by SANSW, which shall identify the: - Mine Subsidence Parameters used for the design. - Main building elements and materials. - Risk of damage due to mine subsidence - Design measures proposed to control the risks. - Comment on the: - likely building damage in the event of mine subsidence. - sensitivity of the design to greater levels of mine subsidence.
5.	Submit a final design incorporating the design methodology contained in the "Engineering Impact Statement", for acceptance by Subsidence Advisory NSW prior to commencement of construction. It shall include certification by a qualified structural engineer to the effect that the improvements will remain "safe, serviceable and any damage from mine subsidence will be limited to cosmetic damage, and readily repairable" taking into consideration the mine subsidence parameters outlined above.
6.	The final design is to be submitted for acceptance by Subsidence Advisory NSW prior to the commencement of any construction work and shall: - Be developed from design accompanying the Development Application. - Include sufficient drawing plans, long-sections, elevations and details, to fully describe the work and proposed mine subsidence mitigation measures. - Include design mitigation measures to reduce the transfer of horizontal strain into building structures. - Include design mitigation measures to relieve excessive strains into building structures.

	e) Include an additional grade for tilt due to mine subsidence, in excess of the minimum Code requirements for structures including pipes, gutters and wet areas. f) For underground pipes or conduits allow for flexible joints, flexible bedding surround and flexible building connections and penetrations. g) Ensure there is sufficient capacity in any storage structure for tilt due to mine subsidence. h) Locate underground structures to facilitate ease of repair and replacement. i) Ensure internal finishes are installed in accordance with relevant codes and standards and industry best practice guidelines with additional provision for mine subsidence. j) Ensure there is suitable provision for articulation jointing in building elements. All control joints including articulation for mine subsidence are to be shown on the design plans and elevations, k) Ensure there is provision for isolation joints between adjoining structures. For example between a building and adjacent paving. l) All roads, driveways and pavement areas, as shown on the approved plans, are to be designed as flexible structures with an asphalt surface. If a concrete surface course is required, it shall be designed to include expansion and crack control joints or sacrificial sections to minimise the risk of damage from mining subsidence.
DURING CONSTRUCTION	
7.	Establish a number of permanent survey marks to AHD so that building movement can be monitored should mine subsidence occur. Details are to be forwarded to <i>Subsidence Advisory NSW</i> .
POST CONSTRUCTION	
8.	Upon completion of construction, works-as-executed certification by a qualified engineer is to be forwarded to the <i>Subsidence Advisory NSW</i> confirming that construction was in accordance with the plans approved by <i>Subsidence Advisory NSW</i> .

Dispute Resolution

If you are dissatisfied with the determination of this application an appeal may be formally submitted with the Chief Executive Office for an independent internal review. The application must be made in writing and must provide reasons why the determination should be changed.